

AMENDMENTS TO THE SPECIFICATION

In the Specification

Please insert as the first paragraph of the specification:

-- The present application is a continuation of U.S. Patent Application Serial Number 09/607,669 filed on June 30, 2000, currently pending. --

Please delete the paragraph beginning on page 3, line 8 and insert the following in place thereof:

-- Texture and Rendering Engine Compression (TREC) was developed by Microsoft Corporation. This technique is very similar to the JPEG standard since it is based on the two-dimensional discrete cosine transform (DCT) of 8x8 pixel blocks and quantization of coefficients. This approach provides variable compression ratios with satisfactory visual quality. However, ~~implement~~ implementing a hardware DCT decoder on a graphics accelerator board only for texture decompression is relatively expensive. --

Please delete the paragraph beginning on page 4, line 4 and insert the following in place thereof:

-- FXT1 may be considered an extension of the S3TC approach, since it separately encodes equally sized blocks of 4x8 texels by small local palettes (look-up tables). FXT1 has four modifications, however ~~the~~ all the modifications have a common approach: (1) some basic colors (RGB555) are stored in a block, (2) a local palette (or palettes) is generated by interpolation of basic colors, and (3) each texel is represented by index of the most appropriate color from the corresponding look-up table. --

Please delete the paragraph beginning on page 9, line 5, and insert the following in place thereof:

-- Importantly, most of the embodiments of the present invention are described with regard to texture compression rather than image compression. However, the present invention is not so limited. Methods for texture compression and image compression have two common objectives ~~requirements~~, namely: (1) high compression ratios, and (2) no visible image degradation. The present invention satisfies both of these objectives. Additionally, texture compression requires fast real-time decoding and efficient random texel access. Fast decoding and random access are of high importance for texture encoding techniques because texels are usually fetched randomly during rendering and they should be decoded as fast as possible to provide appropriate fill-rates. Accordingly, by meeting the requirements for texture compression the method of the present invention is equally applicable to image compression. The practical use of the present invention to image compression is application dependent however.--

Please delete the paragraph beginning on page 24, line 4, and insert the following in place thereof:

-- In general, most embodiments of the present invention provide better image quality than prior art compression methods. This is because most embodiments provide more independently unique colors per texture block. Some prior art methods use two basic colors and two interpolated colors, but these ~~Prior~~ prior art methods on average do not provide the same quality as a method that provides, for example, four independent colors. This is because the two interpolated colors are not independent, and therefore have underlying color similarity to the two basic colors. On average, this dependency as expected degrades the quality of the compression that can be achieved. Thus, in some

embodiments, the present invention achieves better compression quality by providing more independent basic colors. --